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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/048,017	01/28/2002	Pascal Magain	MAGAIN1	1293

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EXAMINER

GARRETT, DAWN L

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 12/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/048,017

Applicant(s)

MAGAIN ET AL.

Examiner

Dawn Garrett

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 17-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 and 17-25 is/are allowed.
- 6) ☒ Claim(s) 26-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. This Office's action is in response to the amendment dated October 17, 2003, paper no. 8. Claims 1, 2, 4-11, 13-15, 17, 18, and 20-22 were amended. Claims 26-40 were added. Claim 16 was cancelled. Claims 1-15 and 17-40 are currently pending.
2. The objection to the specification set forth in paper no. 7 (mailed July 17, 2003), paragraph 2 is maintained. While the specification does discuss the drawings beginning at the bottom of page 7, the specification does not contain the heading "Brief Description of Drawings".
3. The objections set forth in paper no. 7, par. 3, are withdrawn.
4. The rejection of claim 16 under 35 USC 112, second paragraph, set forth in paper no. 7, par. 6, is withdrawn due to the cancellation of claim 16.
5. The rejection of claims 1 and 7 under 35 U.S.C. 102(b) as being anticipated by Hsieh et al. (US 5,674,635) is withdrawn due to the amendment of claim 1.
6. The rejection of claims 1, 2, 7, 18, and 21-24 under 35 U.S.C. 102(e) as being anticipated by Yap (US 6,307,528) is withdrawn due to the amendment of claims 1 and 18.
7. The rejection of claims 4-6 under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al. (US 5,674,635) is withdrawn.
8. The rejection of claims 3 and 8-14 under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al. (US 5,674,635) in view of Schachter et al. (US 4,509,066) is withdrawn.

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9. The rejection of claims 15 and 25 under 35 U.S.C. 103(a) as being unpatentable over Yap (US 6,307,528) in view of Ito et al. (US 5,652,067) is withdrawn.

10. The rejection of claims 19 and 20 under 35 U.S.C. 103(a) as being unpatentable over Yap (US 6,307,528) in view of Schachter is withdrawn.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 27, 31, and 33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 27 recites "wherein the substrate is one of the electrodes". In claim 26, upon which claim 27 depends, the substrate is required to support the electrodes, so it is not understood how the substrate and the electrode can be the same component when claim 26 recites them as separate components. Clarification and/or correction are required.

14. Claim 31 recites "wherein the substrate forms one of said two electrodes". In claim 26, upon which claim 31 ultimately depends, the substrate is required to support the electrodes, so it is not understood how the substrate and the electrode can be the same component when claim 26 recites them as separate components. Clarification and/or correction are required.

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15. In claim 33, it is not understood if the substrate or the electrodes are connected to the current source. For purposes of examination, the substrate is considered to be connected to the current source. Clarification and correction are required.

Claim Rejections - 35 USC § 102

16. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

17. Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Hsieh et al. (US 5,674,635). Hsieh et al. discloses an electroluminescent device comprising a substrate (2), anode (3), organic electroluminescent layer (7), and cathode (6) (see figure 2 and col. 3, lines 25-36). The substrate (2) is comprised of metals including gold and aluminum per the instant substrate comprised of metal (see col. 3, lines 37-40). The substrate supports the anode electrode (3), which is connected to a current source (see figure 2). Hsieh et al. discloses all components of a light emitting device according to claim 26.

18. Claims 26-28 are rejected under 35 U.S.C. 102(e) as being anticipated by Yap (US 6,307,528). Yap discloses contrast organic light-emitting displays (see front page). A device according to the Yap invention includes a substrate (10), low-reflectance film

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(12), lower electrode (14), organic luminescent layer (16), and upper electrode (18) (see figure 1a and col. 3, lines 43-60). A metal substrate is used due to the superior thermal conductivity characteristic of the metal and the ability of the metal to dissipate heat per the instant metal substrate (see col. 4, lines 19-22). The upper electrode is typically the cathode and both electrodes are disclosed as transparent. The cathode (18) is comprised of magnesium-silver thin enough that it appears semi-transparent per the instant claim 28 limitation wherein the second electrode allows at least partial passage of light (see col. 4, lines 47-57). The substrate (10) supports the first electrode (14) and the two electrodes (14) and (18) are connected to a current source (see col. 8, lines 53-58 and figure 2a). The surface of the substrate is coated with a low reflectance film (12) (see col. 4, lines 23-34). Application of the anode to the substrate reads upon the treatment of coating with a conductive material.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 27 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al. (US 5,674,635). Hsieh et al. is relied upon for the rejection of instant claim 26 as set forth above. Hsieh et al. discloses an electroluminescent device comprising a substrate (2), anode (3), organic electroluminescent layer (7), and cathode (6) (see figure 2 and col. 3, lines 25-36). The substrate (2) is comprised of metals

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including gold and aluminum per the instant substrate comprised of metal (see col. 3, lines 37-40). The substrate supports the anode electrode (3), which is connected to a current source (see figure 2). Hsieh fails to specifically teach the substrate itself is connected to the current source per instant claims 30 and 33, the substrate is one of the electrodes per instant claim 27 or that the substrate is in electrically conductive contact with one of the said two electrodes per instant claim 32. Hsieh does, however, teach that the substrate may be metal and the substrate is adjacent the conductive anode. It would have been obvious to one of ordinary skill in the art to use connect the current source to the metal substrate, because both the metal and the anode adjacent the metal substrate are conductors of electricity.

21. Claims 29 and 34-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hsieh et al. (US 5,674,635) in view of Schachter et al. (US 4,509,066). Hsieh et al. is relied upon as set forth above for the rejection of instant claim 26. Hsieh et al. discloses an electroluminescent device comprising a substrate (2), anode (3), organic electroluminescent layer (7), and cathode (6) (see figure 2 and col. 3, lines 25-36). The substrate (2) is comprised of metals including gold and aluminum per the instant substrate comprised of metal (see col. 3, lines 37-40). The substrate supports the anode electrode (3), which is connected to a current source (see figure 2). Hsieh fails to specifically teach the metal substrate is comprised of a steel material. Schachter teaches substrates for an electro-optical device comprising aluminum or stainless steel (see abstract and col. 1, lines 51-54). It would have been obvious to one of ordinary skill in the art at the time of the invention to have selected stainless steel as the metal

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for the Hsieh et al. device, because Schachter teaches aluminum and stainless steel are equivalent substrate materials in the art of electro-optical devices. The stainless steel substrate is deemed to have undergone a surface treatment by way of being formed into a steel sheet during manufacturing per instant claims 29 and 34. Stainless steel comprises components such as iron, chromium, nickel and/or molybdenum, which is deemed to read upon the conductor of electricity in the surface of the stainless steel substrate per instant claim 35. The anode disposed on the stainless steel substrate reads upon the surface coating which is a conductor of electricity. The anode may comprise oxidized tin per instant claim 36 (see col. 4, lines 1-3). The anode may also comprise conductive polymers such as polyaniline or polypyrrole per instant claims 37 and 38 (see col. 4, lines 1-4). Per instant claim 39, the stainless steel substrate is deemed to be a reflective material absent evidence otherwise.

22. Claim 40 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yap (US 6,307,528) in view of Ito et al. (US 5,652,067). Yap is relied upon as set forth above. Yap discloses contrast organic light-emitting displays (see front page). A device according to the Yap invention includes a substrate (10), low-reflectance film (12), lower electrode (14), organic luminescent layer (16), and upper electrode (18) (see figure 1a and col. 3, lines 43-60). The upper electrode is typically the cathode and both electrodes are disclosed as transparent. Yap fails to teach a transparent material is formed over the top electrode in order to protect the cathode from destructive atmospheric air and water. Ito et al. teaches, in analogous art, protective layers over the uppermost electrode of an organic electroluminescent device including a glass

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sheet (see col. 19, lines 62-65). It would have been obvious to one of ordinary skill in the art to have added a transparent protective covering over the Yap EL device to increase the durability of the device, because Ito et al. teaches such as covering provides the benefit of protecting the device from atmospheric deterioration.

Allowable Subject Matter

23. Claims 1-15 and 17-25 are allowed. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to disclose or to render obvious a substrate with a metal or metallic alloy containing conducting part and an outside, insulated part. The prior art also fails to disclose or to render obvious a second electroluminescent device disposed on an opposing side of the substrate in combination with all the other device components required by claim 17.

Response to Arguments

24. Applicant's arguments with respect to claims 1-15 and 17-25 have been considered but are moot in view of the withdrawal of the rejections over these claims. Applicant's arguments filed October 17, 2003 with regard to new claims 26-40 have been fully considered but they are not persuasive. Applicant states "New claim 26 replaces claim 16 and is believed to constitute the essence of claim 16." The examiner respectfully disagrees the new claim 26 incorporates the allowable subject matter of claim 16 (now cancelled), which is drawn to a substrate with two parts, a conductive part and an insulative part, where the conductive part can be connected to the current source. New claim 26 does not recite an insulative part for the substrate. Accordingly, claims 26-40 have been rejected as set forth in this Office action.

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Conclusion

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

26. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dawn Garrett whose telephone number is (703) 305-0788. The examiner can normally be reached Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia Kelly can be reached at (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703)872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2351.

D.G.

D.G.

December 12, 2003

CYNTHIA H. KELLY
SUPERVISOR, ART UNIT 1774
TECHNICAL STAFF

Cynthia H. Kelly